

Job: _____
 Engineer: _____
 Contractor: _____
 Prepared By: _____ Date: _____
 Model: _____ Indoor/Outdoor: _____

Raytherm™ Residentials

Hydronic Heating Boilers

Models 42-180

Applications

- Radiant Heating
- Hydronic Space Heating
- Snow Melting

High Efficiency

Heating efficiencies meet or exceed NAECA standards.

Factory Installed Circulator and Bypass

Thermostatically-controlled circulator maintains proper flow through the boiler. As a packaged system, installation is fast and easy.

Electronic Ignition

Intermittent pilot ignition improves system efficiency by using fuel only when there is a call for heat.

Compact, Lightweight Design

Even the largest model slips easily into tight spaces.

Easy to Plumb, Easy to Service

Inlet and outlet water piping, gas connection, wiring and controls are all up front for easy access.

Safe Operation

Built-in manual reset safety sensors shut down the boiler in the event of a flame roll-out or flue gas spillage. Normal working pressure is 125 PSI max.

Fast Response Temperature Sensor

Electronic solid state auto-reset control shuts down the boiler in the event of over-heating caused by a low-flow condition.

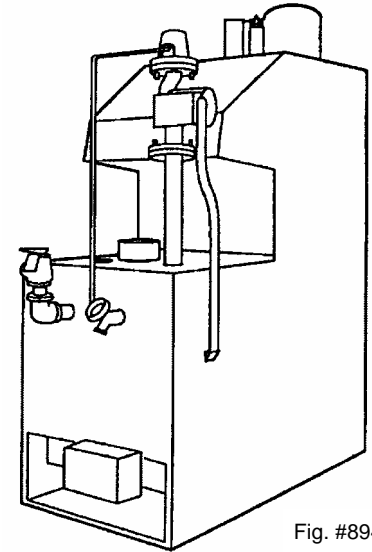


Fig. #8942

Heat Exchanger

- ASME Inspected and Stamped 160 PSIG
- National Board Approved
- Glass-lined Cast Iron Headers
- Copper Finned Tubing
- ASME Steel Tube Sheet
- Silicone O-Rings
- 30 PSIG ASME Pressure Relief Valve
- Temperature and Pressure Gauge
- Cast Iron Pump – 120 VAC, Mounted
- Bypass Assembly

Non-Ferrous Options

- All Bronze Pump, 120 VAC, Mounted
- Bronze Fittings

Controls

- 120V, 60Hz, 1 Ph Power Supply
- 120/24V Transformer
- Pilot
 - Electronic, Intermittent Ignition (IID) - Standard
 - Standing (Thermocouple) - Models 90, 135 and 180 only
- 100% Pilot Shut-off/Lockout (IID only)
- High Limit Control
- Operating Limit Control
- Flow Sensor
- Flue Gas Spillage Sensor
- Flame Rollout Sensor
- Automatic Vent Damper

Gas Control Train

- Fuel
 - Natural Gas
 - Propane Gas
- Firing Mode
 - On/Off - Models 42-66
 - Two-stage Firing - Models 90-180
- Combination Gas Valve
 - Manual Shut-off
 - Redundant Valve Features
 - Gas Pressure Regulator

Construction

- Indoor Construction
- Enclosed Front Controls
- Stainless Steel Burners
- Polytuf Powder Coat Finish
- Built-in Draft Diverter
- Certified for combustible flooring

AFUE Ratings*

Model	AFUE
0042	84
0066	83
0090	83
0135	83
0180	83

*Tested with IID ignition and vent damper

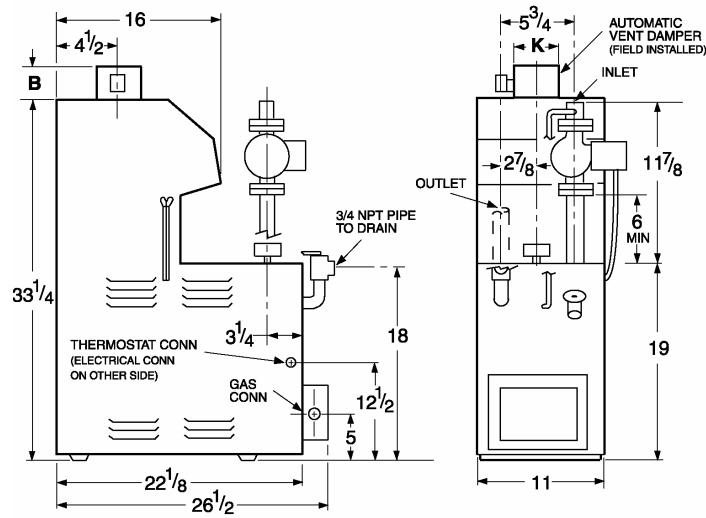


Raypak

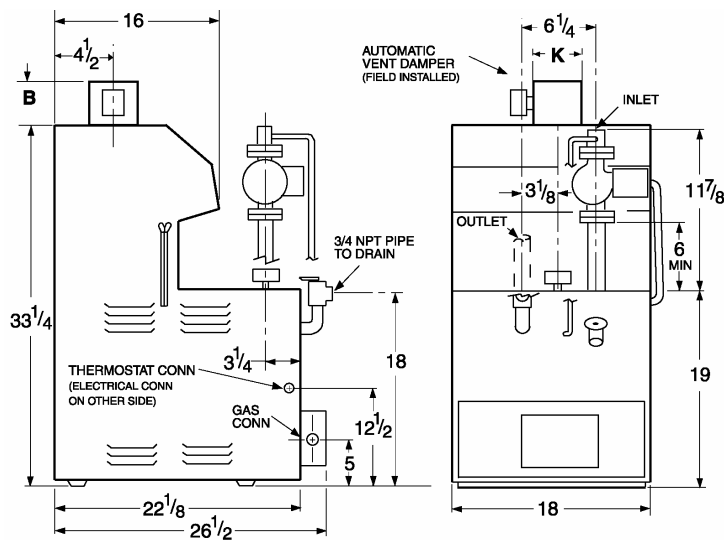
Raypak Residential Hydronic Heating Boilers

Model _____

Models 42, 66 & 90



Models 135 & 180



Model ¹	Input MBTUH ²	Heating Capacity MBTUH	Net I=B=R Rating MBTUH	Piping Connections		B	K Vent Diameter	Approx. Shipping Weight (lbs)	Clearances			
				Water NPT	Gas NPT				Front	Other Sides	Top	Flue Vent
0042	42	35	30	1"	1/2"	5-1/2"	4"	95	4"	6"	16"	6"
0066	66	54	47	1"	1/2"	5-3/4"	5"	105	4"	6"	16"	6"
0090	90	74	64	1"	1/2"	5-3/4"	5"	105	Alcove	6"	16"	6"
0135	135	109	95	1-1/4"	1/2"	6-1/4"	6"	135	Alcove	6"	16"	6"
0180	180	148	129	1-1/4"	1/2"	8"	7"	140	Alcove	6"	16"	6"

Notes:

- Standard models, use "H-" prefix (e.g., H-0042); Non-ferrous models, use "HB-" prefix (e.g., HB-0042)
- Per Section 11.1.2 of the National Fuel Gas Code, derate the appliance firing rate 4% per 1,000 feet above sea level for installations above 2,000 feet.

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